

Grow Your Own

Garden



Background

Kids tend to eat what they grow! Gardening is fun for children, and has been shown to increase their consumption of fruits and vegetables.

Building on the knowledge parents already have, this lesson provides practical tips for growing vegetables at home. We engage parents and children in the gardening experience.

We know that preschool children are eating fewer than the recommended five servings of fruits and vegetables every day.

People who are involved in public health education and research have noticed that children are more likely to eat what they grow themselves. The *Five-A-Day Power Play* campaign suggests that one way to increase fruit and vegetable consumption is to involve children in gardening. Teachers can use gardening to integrate nutrition and health concepts into the broader curriculum so that children learn other academic skills better. Other benefits of gardening are:

- it develops environmental awareness in children by caring for a living environment,
- it promotes intergenerational sharing and learning,
- it provides opportunities for cultural exchange, and
- it builds life skills.

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Heads Up Tips for Educator

During book sharing time, if there are no children present, show the book to the parents.

Ask for ideas why sharing books and telling stories might be a great way to help kids — and can be enjoyable for all of us. (For example, it helps build important skills they will need in school.)

Encourage families to get this book or another like it, and read it to their family. Emphasize that sharing stories, as well as reading books, is a positive family activity.

We know that gardening projects are messy and require some setup time. However, there are real benefits for the children and their families. This lesson plan has been designed as simply as possible to allow you to contain the mess, but still allow children and parents to plant something that they can take home, grow, and eat together.

Please be sure to give the families containers large enough for their plant to grow to "eating size." Show them the larger containers as samples.

Or: let them plant in small, permeable cups (such as paper, peat pots, or egg carton sections) that can be placed in bigger containers at home.

Kindergarten Readiness Skills

- Literacy (reading a story)
- Math (counting and classifying seeds, filling containers to fit size of plant)
- Physical activity (touching seeds, working with soil)
- Science (how plants grow)

Target Audience

Family-Centered education is targeted to mixed groups: adults with their children of preschool age.

Learning Objectives

- Objective 1: Participants will identify the three things a seed needs to be able to grow.
- Objective 2: Participants will plant a vegetable or herb in a container to take home for future eating.
- Objective 3: Participants will describe how gardening activities can enhance nutrition at home.

Time Needed

30-45 minutes

• See section "Expanding and Adapting this Lesson."

Materials

- Music and player: *Dirt Made My Lunch* or *La Tierra y El Mar* by Banana Slug String Band
- Book: *Growing Vegetable Soup (*or *A Sembrar Sopa De Verduras)* by Lois Ehlert

Demonstration Materials:

- Table to use for planting activity
- Old newspapers or other table covering
- Picture of a sandwich, apple, and glass of milk

Gardening Supplies:

- Seeds of different sizes in a small bowl, such as watermelon, apples, pumpkin seeds, mild pepper seeds
- Containers for gardening: 1 per child or family. These could be: large soup cans, 2-pound yogurt or cottage cheese tubs, half-gallon milk containers, etc.
- Seeds for planting (such as lettuce, basil, cilantro, chard)
- Potting soil (1 sq foot or 5 lb bag)
- Pebbles or small rocks for bottom of containers
- Large spoon
- Plastic shopping bag (or similar) for each participant
- Gardening gloves (optional)
- Watering can (optional)
- **Handouts for parents:** (in English and/or Spanish)
 - Tips for Parents
 - o Container Gardening Four Easy Steps
 - o Gardening Time Line
 - o Reading to Children
 - A list of local community gardens in your neighborhood (if available)

Getting Ready

- 1. Copy parent handouts for your group (see Materials list).
- 2. Review the book, *Growing Vegetable Soup (A Sembrar Sopa De Verduras)* by Lois Ehlert.
- 3. Cover table(s) with newspaper or other table covering.
- 4. Arrange items for Family Activity: Plant Your Own—
 - small containers for each family (described in Materials section)
 - small rocks or pebbles for containers
 - seeds (lettuce, basil, cilantro, chard)
 - potting soil placed in a large container with a scooping spoon
 - a watering can (store-bought or orange juice jug with holes punched in the top)
- 5. Fill one container with soil.
- 6. Put overview on large sheet of paper or flip chart.

Grow Your Own Garden:

- Welcome and Introductions
- Warm up
- Book Sharing: Growing Vegetable Soup
- Family Activity: Planting
- Take Home Learning Activities
- 7. Cue the music to the title song on *Dirt Made My Lunch* by Banana Slug String Band.

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Overview

Time needed **Activities**

Gathering **Opening Music**

Play the music while the families gather

5 minutes 1. Welcome and Introduction

- Welcome the group
- Introduce yourself
- Ask families to introduce themselves
- Note that class is for adults and children both

5 minutes 2. Warm Up Activity

- Refer to music: "Dirt made my lunch"
- Ask group: how does dirt make your lunch?
- Use pictures to discuss how milk, sandwich, apple, etc. are made
- Ask families about their gardening experience

10 minutes

3. Book Sharing: Growing Vegetable Soup (A Sembrar Sopa De Verduras))

- Read slowly, showing pictures
- Encourage participation from families
- Reinforce the value of reading together as family

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Overview

continued

10 minutes

4. Family Activity: Planting

A. Demonstration

- Show seeds on plate
- Discuss how seeds grow; what they need
- Demonstrate planting in container

B. Plant Your Own

- Invite children and parents to the planting area
- Provide containers, seeds and planting supplies
- Help each family to plant their own seeds (3 in each container)
- Discuss or assist with watering

5 minutes

5. Take Home Learning Activities

- Share info on community gardens
- Provide handouts to parents

Closing

6. Thank you and Good bye

- Thank the group for coming to the class
- Answer questions as needed

Total: 35 minutes

Welcome and Introduction

As families arrive, play the title song from *Dirt Made My Lunch (La Tiera y El Mar)* by Banana Slug String Band.

(5 min)

Introduce yourself and ask parents and children to introduce themselves.

Tell families the purpose of the class is to learn about growing vegetables and herbs at home so they have some delicious home grown foods to try.

Explain that children and parents will join together to do some reading, planting and sharing ideas during the session.

Post the overview on the wall.

Warm Up Activity (5 min)

How Does Dirt Make Your Lunch?

Show the container of dirt and a picture of a sandwich, an apple, and a glass of milk.

Ask the families, "How does dirt make your lunch?" (Answers may vary:

lettuce and tomatoes grow in garden dirt, cows eat grasses and grains before they make milk, and so forth.)

Ask if anyone has grown fruits or vegetables at home – either in a container or in their yard.

Ask them to share their experience with the group.

"What do you grow?"

"Does your family like to eat the foods you grow?"

Book Sharing (10 min)

Introduce the book *Growing Vegetable Soup (A Sembrar Sopa De Verduras)* by Lois Ehlert — a story about seeds that turn into soup!

Encourage parents and children to sit where they are able to see and hear the story.

Read the story – showing the pictures to the children and parents as you go.

Take time to ask questions to the children about what they notice.

Ideas for engaging children in the story:

"What are these gardening tools?"

"How many potatoes are there?"

"What color is this?"

"Are the plants bigger or smaller now?"

After finishing the book, ask the children to help you understand how a seed grows. Read each of the following steps and ask the children to act out what is happening. Invite parents to act it out with their younger children.

- The seed is in the ground
- The seed sprouts
- The sprout gets sunshine and water
- It grows, and grows and grows
- It is ready to pick a yummy fruit or vegetable to eat!

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Family Activity (10 min)

A. Demonstrate Planting

Walk around the room with a handful of the seeds in the small bowl. Hold them up one by one, and ask the children questions about the seeds.

Allow children over three years old to touch the seeds.

"What is this?"

"A seed"

"What seeds were in the story?"

"What colors are these seeds?"

"Do you know what this seed is?"

"Which seed is big, which seed is little?"

Tell families that you are going to show them how to start a plant during the class. They will have a chance to grow this plant at home and eat it when it is ready.

Explain that it is possible to grow hearty plants in containers – even without a yard. Demonstrate each step while sharing the information.

STEP 1. Choose a container

Key points to discuss:

- Pick a container that is big enough for the plant you choose to grow.
- Think about drainage. Plants need to be able to use water, but not too much water. The container should be waterproof.

To demonstrate:

- Select a container. Options include:
 - \circ one gallon or half-gallon milk or water container
 - o plastic ice cream tubs

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- o five gallon water containers
- o two pound yogurt containers

STEP 2. Provide soil

Key points to discuss:

- Ask families: "Where can you get soil for container gardening?"
- Discuss options for purchasing inexpensive potting soil.

To demonstrate:

- Put small rocks or pebbles in the bottom of the container, to give the water somewhere to drain.
- Using the large spoon put a little potting soil into a container, 2/3 to 3/4 full, saving room at the top for water.
- Take three seeds of one kind from the bowl and show the group what you have.
 - o Count out three seeds with children.
 - Explain that planting more than one seed is a good idea because some seeds may not grow.
 - Push three seeds into the dirt, about 1/2 to 1 inch in, using a fingertip to measure.

STEP 3. Give the plant all it needs

Key points to discuss:

- Watering: Check it frequently to make sure that the soil stays slightly moist, and re-water it if seems to be drying out, usually every three days or so. Do not overwater (soggy soil is a sign of this).
- Sunlight: Place the new seed anywhere that gets about five to six hours of sun a day.

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B. Plant Your Own

Invite children and families to start a container plant they can take home.

Choose containers and small rocks for drainage.

Provide potting soil and seeds for planting, 3 seeds of one kind per pot.

For watering the plants, either:

- let children water the plants, with help, OR,
- if you are not using water, remind the group to water when the plant gets home.

Take Home Learning Activities (5 min) If you have a handout of community gardens in your neighborhood, show the group, and point out the phone numbers so they can call to participate.

Review other handouts:

- Tips for Parents (in English and/or Spanish)
- Container Gardening Four Easy Steps (in English and/or Spanish)
- Gardening Time line (in English and/or Spanish)

Expanding and Adapting this Lesson

1. Use Other Books with This Lesson

Oliver's Vegetables by Vivian French is a useful book for those who prefer more of a story line than is offered in *Growing Vegetable Soup*. Oliver finds out he loves vegetables when he sees them grow in Grandpa's garden.

I'm a Seed (*Soy Una Semilla*) by Jean Marzollo shows how two seeds grow and one seed doesn't know it's turning into a pumpkin. Story has nice suspense but not a lot of detail about gardening.

The Carrot Seed (La Semilla de Zanahoria) by Ruth Krauss offers a short story about a boy growing a carrot even though no one believes it will grow. Shows how seeds need water and sunshine, but graphics are in black and white. Can be combined with some discussion about carrots and carrot recipes.

Tops and Bottoms by Janet Stevens is a book that might be used with older children. It shows cooperation and gardening. It is a little longer than most books.

Ugly Vegetables by Grace Lin describes the gardening experience of a young Asian-American girl. The vegetables that her family grows are different from those in her neighbors' gardens, and she feels unhappy about the difference until she sees the delicious food that can be made from her garden. Her neighbors appreciate the food, too.

We Can Eat the Plants by Rozanne Williams shows how a boy in a garden enjoys eating different parts of the plants. You can play "Roots, Stems, Leaves" from the Banana Slug CD and do a session about different parts of plants you can eat.

Tortilla Factory (*La Tortilleria*) by Gary Paulsen shows how a corn seed becomes a tortilla in a cycle of life. You can grow corn together and share tortillas as part of the lesson.

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As an alternate idea, pick a seasonal vegetable or fruit theme, such as pumpkins or apples. Use a story such as "Too Many Pumpkins" by Linda White or "Manzanas" or "Calabazas" by Ann L. Burkhardt.

2. Use a Felt Board

Use the enclosed colored pictures of growing things to construct these props:

- Print on sturdy paper if possible, and laminate.
- Attach hook/loop (eg. *Velcro*) fastener tape in several places to the back of each picture.
- Cut out the roots to the plant at the bottom.

Ask someone to put the plant on the board and as you talk about what plants need to grow, add the sun and the rain cloud. Add the roots to show the plant growing. You can use the water can to show indoor gardening.

3. Explore Organic gardening and Farming

Organic gardening and farming have been gaining more and more supporters and practitioners. However, families who are involved in agriculture may have strong feelings about crop growing practices. Provide:

- information on what organic is
- information on which fruits and veggies are most loaded with pesticides
- information on sources for organic produce, (a good resource is the California Alliance with Family Farmers [CAFF])

4. Use the Gardening Time Line Poster

If planting outdoors, choosing the right season to start your plant is crucial. For children, a fast-growing seed is often most enjoyable to grow. Lettuce, carrots and radishes are fast growers.

With the group, look at the gardening time line (handout or poster on the wall). Notice what we can plant this month – talk to the group about what size of container or plot of ground is needed for that plant. How long will it take to grow to eating size?